## **Claims**

What is claimed is:

1. A compound of Formula I:

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wherein:

B is adenine, guanine, cytosine, uracil, thymine, 7-deazaadenine, 7-deazaadenine, 7-deaza-8-azaguanine, 7-deaza-8-azaguanine, 7-deaza-8-azaadenine, inosine, nebularine, nitropyrrole, nitroindole, 2-aminopurine, 2-amino-6-chloropurine, 2,6-diaminopurine, hypoxanthine, pseudouridine, pseudocytosine, pseudocytosine, pseudoisocytosine, 5-propynylcytosine, isocytosine, isoguanine, 7-deazaguanine, 2-thiopyrimidine, 6-thioguanine, 4-thiothymine, 4-thiouracil, *O*<sup>6</sup>-methylguanine, *N*<sup>6</sup>-methyladenine, *O*<sup>4</sup>-methylthymine, 5,6-dihydrothymine, 5,6-dihydrouracil, 4-methylindole, triazole, or pyrazolo[3,4-d]pyrimidine; and B is optionally substituted with one or more alkyl, alkenyl, alkynyl, cycloalkyl, (cycloalkyl)alkyl, hydroxy, or halo; and

R<sup>1</sup> is alkyl, alkenyl, alkynyl, cyano, azido, or fluoromethyl; or a pharmaceutically acceptable salt or solvate thereof.

- 2. The compound of claim 1 wherein B is adenine, guanine, cytosine, uracil, or thymine; which B is optionally substituted with one or more alkyl, alkenyl, alkynyl, cycloalkyl, (cycloalkyl)alkyl, hydroxy, or halo.
- The compound of claim 1 wherein B is 7-deazaadenine, 7-deazaguanine, 7-deaza-8-azaguanine, 7-deaza-8-azaadenine, inosine, nebularine, nitropyrrole, nitroindole, 2-aminopurine, 2-amino-6-chloropurine, 2,6-diaminopurine,
- 30 hypoxanthine, pseudouridine, pseudocytosine, pseudoisocytosine, 5-

propynylcytosine, isocytosine, isoguanine, 7-deazaguanine, 2-thiopyrimidine, 6-thioguanine, 4-thiothymine, 4-thiouracil,  $O^6$ -methylguanine,  $N^6$ -methyladenine,  $O^4$ -methylthymine, 5,6-dihydrothymine, 5,6-dihydrouracil, 4-methylindole, triazole, or pyrazolo[3,4-d]pyrimidine; and B is optionally substituted with one or more alkyl, alkenyl, alkynyl, cycloalkyl, (cycloalkyl)alkyl, hydroxy, or halo

- 4. The compound of claim 1 wherein B is adenine, guanine, cytosine, uracil, or thymine.
- 10 5. The compound of claim 1 which is a compound of formula II:

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wherein R<sup>1</sup> has any of the values defined in claim 1.

6. The compound of claim 1 which is a compound of formula III:

$$HO \longrightarrow N \longrightarrow N \longrightarrow NH_2$$
III

wherein  $R^1$  has any of the values defined in claim 1.

7. The compound of any one of claims 1-6 wherein  $R^1$  is alkyl.

8. The compound of any one of claims 1-6 wherein  $R^1$  is methyl.

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9. The compound of any one of claims 1-6 wherein R<sup>1</sup> is fluoromethyl.

- 10. The compound of any one of claims 1-6 wherein R<sup>1</sup> is alkenyl.
- 10 11. The compound of any one of claims 1-6 wherein R<sup>1</sup> is vinyl.
  - 12. The compound of any one of claims 1-6 wherein R<sup>1</sup> is alkynyl.
  - 13. The compound of any one of claims 1-6 wherein  $R^1$  is ethynyl.
  - 14. The compound of any one of claims 1-6 wherein R<sup>1</sup> is cyano.
  - 15. The compound of any one of claims 1-6 wherein  $R^1$  is azido.
- 20 16. A pharmaceutical composition, comprising an effective amount of a compound of Formula I as described in any one of claims 1-15, or a pharmaceutically acceptable salt or solvate thereof, and a pharmaceutically acceptable excipient.
- 25 17. A pharmaceutical composition comprising an effective amount of a compound of Formula I as described in any one of claims 1-15, or a pharmaceutically acceptable salt or solvate thereof; a pharmaceutically acceptable excipient; and a therapeutically effective amount of another therapeutic agent.

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18. The pharmaceutical composition of claim 16 which further comprises an AIDS treatment agent selected from an HIV inhibitor agent, an anti-infective agent, and an immunomodulator.

- 19. The pharmaceutical composition of claim 16 which further comprises an5 HIV-protease inhibitor.
  - 20. The pharmaceutical composition of claim 16 which further comprises a reverse transcriptase inhibitor.
  - 21. The pharmaceutical composition of claim 16 which further comprises a non-nucleoside reverse transcriptase inhibitor.
- 10 22. The pharmaceutical composition of claim 16 which further comprises an HIV integrase inhibitor.
  - 23. A method of inhibiting a viral infection in an animal (e.g. a mammal), comprising administering to the animal, an effective amount of a compound of Formula I as described in any one of claims 1-15, or a pharmaceutically acceptable salt or solvate thereof.

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- 24. A method for the treatment or prevention of the symptoms or effects of a viral infection in an animal comprising administering to the animal, an effective amount of a compound of Formula I as described in any one of claims 1-15, or a pharmaceutically acceptable salt or solvate thereof.
- 25. A method of inhibiting an HCV infection in an animal comprising administering to the animal, an effective amount of a compound of Formula I as described in any one of claims 1-15, or a pharmaceutically acceptable salt or solvate thereof.
- 25 26. A method for the treatment or prevention of the symptoms or effects of HCV infection in an infected animal comprising administering to the animal, an effective amount of a compound of Formula I as described in any one of claims 1-15, or a pharmaceutically acceptable salt or solvate thereof.

27. A method of inhibiting a viral enzyme comprising contacting a sample suspected of containing viral infected cells or tissues with an effective amount of a compound of Formula I as described in any one of claims 1-15, or a pharmaceutically acceptable salt or solvate thereof.

- 28. A method of inhibiting RNA-dependent RNA polymerase in an animal comprising administering to the animal, an effective amount of a compound of Formula I as described in any one of claims 1-15, or a pharmaceutically acceptable salt or solvate thereof.
- 10 29. A compound of Formula I as described in any one of claims 1-15, or a pharmaceutically acceptable salt or solvate thereof, for use in medical therapy.

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- 30. The use of a compound of Formula I as described in any one of claims 1-15, or a pharmaceutically acceptable salt or solvate thereof, to prepare a medicament useful for inhibiting a viral infection in an animal.
- 31. The use of a compound of Formula I as described in any one of claims 1-15, or a pharmaceutically acceptable salt or solvate thereof, to prepare a medicament useful for the treatment or prevention of the symptoms or effects of a viral infection in an animal.
- 20 32. The use of a compound of Formula I as described in any one of claims 1-15, or a pharmaceutically acceptable salt or solvate thereof, to prepare a medicament useful for inhibiting an HCV infection in an animal.
  - 33. The use of a compound of Formula I as described in any one of claims 1-15, or a pharmaceutically acceptable salt or solvate thereof, to prepare a medicament useful for the treatment or prevention of the symptoms or effects of HCV infection in an infected animal.
    - 34. The use of a compound of Formula I as described in any one of claims 1-15, or a pharmaceutically acceptable salt or solvate thereof, to prepare a

medicament useful for inhibiting an RNA-dependent RNA polymerase in an animal.

35. A process for making a pharmaceutical composition comprising combining a compound of Formula I as described in any one of claims 1-15, or a
 5 pharmaceutically acceptable salt or solvate thereof, and a pharmaceutically acceptable excipient.